

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A magnetic tape apparatus for recording and/or reproducing information on a magnetic tape, the apparatus comprising:

a drum comprising:

a stationary drum portion including a sliding portion against which [[a]] the magnetic tape is in sliding contact during operation of the apparatus[.]; and

a rotary drum portion rotatably connected to said stationary drum portion by a shaft, the rotary drum portion including a magnetic head for recording and/or reproducing information on said magnetic tape;

wherein said sliding portion has ~~at least one~~ a generally flat portion formed by ~~cutting around~~ a circumferential surface of said sliding portion so that the generally flat portion is substantially parallel to a sliding contact surface of said magnetic tape, and has a plurality of peak portions formed ~~by cutting around the circumferential surface of the sliding portion~~ so that said peak portions protrude from said flat portion at a predetermined pitch;

wherein said flat portion and said peak portions are formed so as to extend generally circumferentially around the stationary drum and to be substantially parallel to a lead formed in said stationary drum for guiding the magnetic tape as it slides along the sliding portion of the drum;

wherein a surface roughness R_{max} , defined as a maximum height of the peak portions, is between about 0.5 μm and about 2.0 μm ; and

wherein a width of said flat portion is between about 10 μm and about 230 μm .

2. (Canceled)

3. (Canceled)

4. (Original) The magnetic tape apparatus according to claim 1, wherein said sliding portion is a guide for guiding said magnetic tape.

5. (Canceled)

6. (Currently amended) The magnetic tape apparatus according to claim ~~[[5]]~~ 1, wherein the circumferential surface of said stationary drum ~~processed by cutting~~ has a surface roughness of between about 1.0 μm and about 2.0 μm ~~1 to 2 μm~~ , said surface roughness being ~~defined in terms of~~ a maximum height of said peak portions.

7. (Currently amended) The magnetic tape apparatus according to claim 4, wherein the circumferential surface of said guide ~~processed by cutting~~ has a surface roughness of between about 1.0 μm and about 2.0 μm ~~0.1 to 10 μm~~ , said surface roughness being ~~defined in terms of~~ a maximum height of said peak portions.

8. (Currently amended) A method for producing a magnetic tape apparatus comprising a sliding portion against which a magnetic tape is in sliding contact, said method comprising ~~the steps of:~~

providing a cutting tool having a tip portion and generally straight sides extending from the tip portion;

~~forming at least one flat portion by cutting a circumferential surface of said sliding portion to form a so that the flat portion is substantially parallel to a sliding contact surface of said magnetic tape; and forming a plurality of peak portions by cutting so that the~~ and to form peak portions ~~protrude~~ protruding from said flat portion at a predetermined pitch; and

controlling a width of the flat portion by controlling a force by which the cutting tool is pressed against the circumferential surface of the sliding portion during the cutting step and/or controlling a speed at which the cutting tool is moved along the circumferential surface of the sliding portion during the cutting step.

9. (New) The magnetic tape apparatus according to claim 1, wherein said flat portion and said peak portions are formed in a spiral pattern around the sliding portion.

10. (New) The magnetic tape apparatus according to claim 1, wherein said flat portion and said peak portions are formed at an oblique angle with respect to a circumference of the sliding portion.

11. (New) The magnetic tape apparatus according to claim 1, further comprising:

a stationary guide positioned adjacent said drum for guiding the magnetic tape to or from the drum, the stationary guide including a circumferential surface, an upper flange connected to an upper portion of the circumferential surface of the stationary guide and a lower flange connected to a lower portion of the circumferential surface of the stationary guide; and

a rotary guide positioned adjacent said drum for guiding the magnetic tape to or from the drum, the rotary guide being rotatable about an axis and including a circumferential surface, an upper flange connected to an upper portion of the circumferential surface of the rotary guide and a lower flange connected to a lower portion of the circumferential surface of the rotary guide;

wherein the circumferential surface of the stationary guide and/or the circumferential surface of the rotary guide has a generally flat portion formed around the circumferential surface of the guide so the generally flat portion formed around the circumferential surface of the guide is substantially parallel to a contact surface of said magnetic tape, and has a plurality of peak portions formed around the circumferential surface of the guide so said peak portions formed around the circumferential surface of the guide protrude from said flat portion formed around the circumferential surface of the guide at a predetermined pitch.

12. (New) The magnetic tape apparatus according to claim 1, wherein the flat portion has a concave form.

13. (New) A method for producing a magnetic tape apparatus according to claim 8, wherein the cutting step includes cutting the surface of the sliding portion at an oblique angle with respect to a circumference of the sliding portion so said flat portion

and said peak portions are formed at the oblique angle with respect to the circumference of the sliding portion.

14. (New) A method for producing a magnetic tape apparatus according to claim 8, wherein said tip portion of the cutting tool includes a curve and the cutting step includes cutting the surface of the sliding portion to form the flat portion so the flat portion has a concave form.

15. (New) A method for producing a magnetic tape apparatus according to claim 8, wherein said cutting step includes forming said flat portion and said peak portions in a spiral pattern around the sliding portion.

16. (New) A method for producing a magnetic tape apparatus according to claim 8, wherein the apparatus further includes:

a stationary guide positioned adjacent said sliding portion for guiding the magnetic tape to or from the sliding portion, the stationary guide being fixed and including a circumferential surface, an upper flange connected to an upper portion of the circumferential surface of the stationary guide and a lower flange connected to a lower portion of the circumferential surface of the stationary guide; and

a rotary guide positioned adjacent said sliding portion for guiding the magnetic tape to or from the sliding portion, the rotary guide being rotatable about an axis and including a circumferential surface, an upper flange connected to an upper portion of the circumferential surface of the rotary guide and a lower flange connected to a lower portion of the circumferential surface of the rotary guide; and the method further comprises:

cutting the circumferential surface of the stationary guide to form a flat portion being substantially parallel to a contact surface of the magnetic tape and to form peak portions protruding from said flat portion formed in the circumferential surface of the stationary guide and/or cutting the circumferential surface of the rotary guide to form a flat portion being substantially parallel to a contact surface of the magnetic tape and to

form peak portions protruding from said flat portion formed in the circumferential surface of the rotary guide.

17. (New) A magnetic tape apparatus for recording and/or reproducing information on a magnetic tape, the apparatus comprising:

a drum comprising:

a stationary drum portion including a sliding portion against which the magnetic tape is in sliding contact during operation of the apparatus; and

a rotary drum portion rotatably connected to said stationary drum portion by a shaft, the rotary drum portion including a magnetic head for recording and/or reproducing information on said magnetic tape;

wherein said sliding portion has a generally flat portion formed around a circumferential surface of said sliding portion so the generally flat portion is substantially parallel to a sliding contact surface of said magnetic tape;

wherein the sliding portion has a plurality of peak portions formed around the circumferential surface of the sliding portion so said peak portions protrude from said flat portion at a predetermined pitch; and

wherein the flat portion has a concave form.

18. (New) The magnetic tape apparatus according to claim 17, further comprising:

a stationary guide positioned adjacent said drum for guiding the magnetic tape to or from the drum, the stationary guide including a circumferential surface, an upper flange connected to an upper portion of the circumferential surface of the stationary guide and a lower flange connected to a lower portion of the circumferential surface of the stationary guide; and

a rotary guide positioned adjacent said drum for guiding the magnetic tape to or from the drum, the rotary guide being rotatable about an axis and including a circumferential surface, an upper flange connected to an upper portion of the circumferential surface of the rotary guide and a lower flange connected to a lower portion of the circumferential surface of the rotary guide;

wherein the circumferential surface of the stationary guide and/or the circumferential surface of the rotary guide has a generally flat portion formed around the circumferential surface of the guide so the generally flat portion formed around the circumferential surface of the guide is substantially parallel to a contact surface of said magnetic tape, and has a plurality of peak portions formed around the circumferential surface of the guide so said peak portions formed around the circumferential surface of the guide protrude from said flat portion formed around the circumferential surface of the guide at a predetermined pitch.